

means for generating requested HTML pages dynamically from provided predetermined templates ~~on-board~~ and current status information related to the hard copy apparatus in response to request type messages and means for processing web-based client input to said the pages in response to process type messages.

5. (currently amended) The ~~invention~~ server as set forth in claim 4, comprising wherein:

said the HTML pages are interactive pages from the templates enabling the clients to specify electronic mail server settings and to configure notification events.

6. (currently amended) The ~~invention~~ server as set forth in claim 5, comprising wherein:

the interactive pages enable ~~enabling~~ the clients to specify new configurations for subcomponents of said the means for deciphering messages.

7. (currently amended) The ~~invention~~ server as set forth in claim 6, comprising wherein:

said the new configurations are submitted for processing to said the means for deciphering messages such that hard copy apparatus diagnostic subroutines employed do actual reconfiguration of said the hard copy apparatus.

8. (currently amended) The ~~invention~~ server as set forth in claim 4, the means for deciphering messages comprising:

means for filtering an in-coming client message based on header data content.

9. (currently amended) The ~~invention~~ server as set forth in claim 8, the means for routing deciphered messages comprising:

means for receiving filtered electronic mail messages and providing appropriate interaction with components of the server subsystem by examining the content described by an associated header of the message and acting on it.

10. (currently amended) The invention server as set forth in claim 1 2, the means for ~~respectively receiving discriminatively routed messages and for executing said the tasks associated with hard copy apparatus controls~~ comprising:

~~interfaced with said hard copy apparatus,~~ means for abstracting hard copy apparatus operational states;

~~interfaced with said hard copy apparatus,~~ means for print job controlling;

interfaced with said means for abstracting, means for data storage managing;
and

~~interfaced with said means for data storage managing,~~ means for data storage.

11. (currently amended) The invention server as set forth in claim 10, comprising wherein:

the means for connecting the apparatus to a network comprises an wherein the electronic mail handler component is invokable by the means for data storage managing for automatically sending an electronic mail to subscribed clients based upon hard copy apparatus operational state changes abstracted by ~~in~~ the means for abstracting.

12. (currently amended) The invention server as set forth in claim 10, comprising wherein:

the means for abstracting comprises providing a status subserver component including a portal with ~~said the~~ hard copy apparatus for transmitting data representing each operational state in a client-server model.

13. (currently amended) The invention server as set forth in claim 12, the status subserver component ~~further~~ comprising:

means for transposing hard copy apparatus device specific language into a language for use by other server components.

14. (currently amended) The invention server as set forth in claim 12, the status subserver component ~~further~~ comprising:

a virtual multiplexer for permitting and managing data such that a plurality of clients can communicate substantially simultaneously with the hard copy apparatus.

15. (currently amended) The ~~invention~~ server as set forth in claim 10, the means for data storage managing ~~further~~ comprising:

a COM executable server subcomponent for saving and retrieving electronic mail and hard copy apparatus operational state notification settings.

16. (currently amended) The ~~invention~~ server as set forth in claim ~~40~~ 11, the means for data storage managing ~~further~~ comprising:

subcomponents for registering with the status subserver component for predetermined ~~printer~~ hard copy apparatus operational state change notification events.

17. (currently amended) The ~~invention~~ server as set forth in claim 16, further comprising:

when at least one of ~~said~~ the events occurs, the status subserver is configured to provides a call back into the means for data storage managing which then takes appropriate action pursuant to client registration configurations by sending associated electronic mail to all subscriber clients registered for providing notification of ~~said~~ the events.

18. (currently amended) The ~~invention~~ server as set forth in claim 4, ~~said~~ the HTML interface application further comprising:

hyperlinks to a website that leads to web pages that point to the means for generating requested HTML pages .

19. (currently amended) The ~~invention~~ server as set forth in claim 18, comprising:

means for generating requested HTML pages that loads an HTML file containing the predetermined template for the requested HTML page and merges it with current settings corresponding to the hard copy apparatus ~~of diagnostics~~

~~subsystem in the means for data storage, resulting in an HTML page containing current hard copy apparatus settings that is returned to a requesting client.~~

20. (cancelled)

21. (currently amended) A hard copy apparatus, ~~having printing mechanisms which have~~ having reportable operational state conditions, comprising:

an embedded server including computer code for providing an internet interface;

computer code for handling incoming electronic mail and outgoing electronic mail;

~~associated with said computer code providing internet interface, computer code for discriminating deciphering types of HTML data messages received via said the computer code for providing internet interface and messages received via the computer code for handling incoming electronic mail to determine if a given message is a process type message or a request type message;~~

~~computer code handling incoming electronic mail and outgoing electronic mail;~~

~~associated with said computer code discriminating and said computer code handling incoming electronic mail and outgoing electronic mail, computer code for routing data messages from said the computer code for discriminating deciphering types of HTML data messages such that the process and request type messages are discriminately routed and said computer code handling incoming electronic mail and outgoing electronic mail; and~~

~~associated with said computer code for routing, computer code for processing messages data routed by said the computer code for routing data messages such that the hard copy apparatus printing mechanisms can be controlled according to process type messages and said the reportable operational state conditions can be monitored according to request type messages via either said internet interface or said electronic mail.~~

22. (currently amended) The apparatus as set forth in claim 21 comprising:

the computer code for providing internet interface is compatible with a dedicated HTML user interface residing on a remote browser outside a network firewall protecting access to ~~said~~ the apparatus.

23. (currently amended) The apparatus as set forth in claim 22 ~~comprising~~ wherein the computer code for processing messages comprises:

computer code for generating requested interactive HTML pages dynamically from provided predetermined templates on-board ~~said the~~ apparatus according to request type messages and computer code for processing web-based client input from the interactive HTML pages according to process type messages.

24. (currently amended) The apparatus as set forth in claim 23 wherein ~~comprising:~~

~~said the~~ templates including include computer code for reporting apparatus current operational status.

25. (currently amended) The apparatus as set forth in claim 23 wherein ~~comprising:~~

~~said the~~ templates including include computer code for controlling apparatus functionality.

26. The apparatus as set forth in claim 21 comprising:

computer code for automatically generating and dispatching electronic mail messages indicative of the apparatus current operational states to a client outside a network firewall protecting ~~said the~~ apparatus.

27. (currently amended) The apparatus as set forth in claim 21 wherein ~~comprising:~~

~~said the~~ computer code for processing messages routing data including includes computer code for setting apparatus configuration ~~via~~ according to an electronic mail process type message ~~predetermined electronic mail messages received.~~

28. (currently amended) The apparatus as set forth in claim 21 wherein comprising:

said the computer code for processing messages ~~routing data including~~ includes computer code for performing apparatus diagnostics according to an electronic mail request type message via predetermined electronic mail received.

29. (currently amended) The apparatus as set forth in claim 21 wherein comprising:

said the computer code for processing messages ~~routing data including~~ includes computer code for performing apparatus hard copy printing operation according to an electronic mail process type message via predetermined electronic mail received.

30. (currently amended) The apparatus as set forth in claim 21 wherein comprising:

said the computer code for processing messages ~~routing data including~~ includes computer code for responding to device status queries made in an electronic mail request type message. ~~via predetermined electronic mail received.~~

31. (currently amended) A method for operating a computer peripheral apparatus protected by a network firewall, comprising the steps of:

providing the apparatus with a server interface;

storing predetermined subsets of operational parameters of the apparatus wherein each subset is related to one of a plurality of a remote clients having access to the server interface; and

upon a change of operational parameter state of ~~said~~ the apparatus, determining if the change is associated with any ~~said~~ subset and sending an electronic message via ~~said~~ the server interface to each client associated with ~~said~~ the subset or subsets associated with the change wherein the message content includes notification of the change of operational parameter state.

32. (currently amended) The method as set forth in claim 31, in the step of providing the apparatus with a server interface, the server interface further comprising:

a web server application associated with an internet browser having a preconfigured user interface associated with the web server application wherein communicating through ~~said~~ the firewall is provided according to predetermined protocols shared by ~~said~~ the web server application and ~~said~~ the preconfigured user interface.

33. (currently amended) The method as set forth in claim 32 comprising the step of:

operating functions of the computer peripheral apparatus via at least one of ~~said~~ the protocols.

34. (original) The method as set forth in claim 31 comprising the step of:
operating functions of the computer peripheral apparatus via electronic mail having a predetermined format accessible to subscribed clients.

35. (currently amended)The method as set forth in claim 32 comprising the step of:

operating diagnostic and maintenance functions on the computer peripheral apparatus via at least one of ~~said~~ the protocols.

36. (original) The method as set forth in claim 31 comprising the step of:
operating diagnostic and maintenance functions of the computer peripheral apparatus via electronic mail having a predetermined format accessible to subscribed clients.

37. (currently amended)The method as set forth in claim 32 comprising the step of:

reporting current operational states of the computer peripheral apparatus via ~~said~~ the protocols.

38. (currently amended) The method as set forth in claim 31 the step of storing further comprising:

abstracting operational states of the computer peripheral apparatus in a virtual multiplexer for permitting and managing data such that a plurality of clients outside of ~~said~~ the firewall can communicate substantially simultaneously with the apparatus.

39-42 (cancelled)